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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,032	01/29/2004	Thomas McGee	102790-170	4817

7590 09/15/2004

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EXAMINER	
LARKIN, DANIEL SEAN	
ART UNIT	**PAPER NUMBER**
2856	

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/767,032	MCGEE ET AL.	
	Examiner	Art Unit	
	Daniel S. Larkin	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *29 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *29 Januar 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Page 6, line 6: A space should be inserted between the terms "two" and "to" and "five" and "minute".

Page 7, line 16: A space should be inserted between the terms "twenty" and "feet".

Page 7, line 18: A space should be inserted between the terms "three and one-half" and "feet".

Page 8, line 21: The term "Teflon" should be corrected to read -- TEFLON -- since all trademarks should be capitalized.

Page 10, line 20: The abbreviation "FIG." should be corrected to read -- Figure -- in order to maintain consistency in the terminology used.

Page 13, line 1: A space should be inserted between the term "Figure" and the numeral "5". Appropriate correction is required.

Claim Objections

4. Claims 1-15 are objected to because of the following informalities:

Re claim 1, claim line 2: The phrase "the adsorbing unit" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

DETAILED ACTION

1. Acknowledgement is made of applicant's preliminary amendment filed 29 January 2004.

Specification

2. The substitute specification filed 29 January 2004 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: A clean unmarked copy of the specification does not appear to have been forwarded to the Office with the amended specification. Please note that although the specification has not been entered, the examiner has read the specification, and any comments about the specification are related to the amended specification.

3. The disclosure is objected to because of the following informalities:

Page 2, line 9: A space should be inserted between the terms "thirty" and "minutes" and "sixty" and "minutes".

Page 1, line 3: The phrase -- now U.S. Patent No. 6,708,550, -- should be inserted after the date "February 2003".

Page 5, lines 8 and 9: All occurrences of the designation "?m" should be corrected to read -- μm --.

Page 5, line 22: The term "Teflon" should be corrected to read -- TEFLON -- since all trademarks should be capitalized.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,269,169 (Trenkle et al.).

With respect to the limitations of claim 1, the reference to Trenkle et al. discloses an apparatus for capturing and analyzing aromas from botanical sources comprising positioning the end of an adsorbing unit/trapping tube (32) of the apparatus in proximity to an odor-emitting source (10), wherein the apparatus comprises said adsorbing unit (32) comprising an interior surface of an adsorbent material, a suction device/negative pressure pump (28) for drawing the odor chemicals into the unit (32); and a connecting tube (30) which connects the unit (32) and the suction device (28); and drawing odor chemicals from the odor-emitting source (10) into the adsorbing unit (32) with the suction device (28) or a collection time sufficient to capture the odor chemicals on the adsorbent material.

With respect to the limitation of claim 2, the reference to Trenkle et al. discloses that the odor-emitting chemicals are aromas from a botanical source (10).

With respect to the limitation of claim 3, the reference discloses a plurality of different adsorbent materials that may be utilized in the trapping tube (32).

With respect to the limitation of claim 7, the adsorbing unit is comprised of one capillary trapping tube (32).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3, and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,310,681 (Rounbehler et al.).

With respect to the limitations of claim 1, the reference to Rounbehler et al. discloses a hand-held vapor sampler for use with a gas chromatograph apparatus comprising an adsorbing unit/collector (140) comprising an interior surface of an adsorbent material (col. 5, lines 15-32); a suction device/blower (130) for drawing odor chemicals into the adsorbing unit (col. 8, lines 40-42); and a connecting tube/central bore (138) which connects the adsorbing unit (140) to the suction device/blower (130) to draw samples into the adsorbing unit. Although, not expressly disclosed, the examiner argues that the method limitations of claim 1 are inherently taught in that the hand-held sampling gun must be positioned near the odor-emitting source to collect a sample; and that the sampling gun is placed near the odor-emitting source for a sufficient amount of time to collect a sample.

With respect to the limitation of claim 3, the reference to Rounbehler et al. discloses that the absorbent material may comprise a non-polar adsorbent or an intermediate polarity adsorbent.

With respect to the limitation of claim 5, the reference to Rounbehler et al. discloses that the absorbent material may be a coating of methyl silicone (col. 5, lines 23-26).

With respect to the limitation of claim 6, the reference to Rounbehler et al. discloses that the absorbent material may be a coating of methyl/phenyl silicone (col. 5, lines 23-26).

With respect to the limitations of claims 7 and 8, the reference to Rounbehler et al. discloses that one preferred collector (46), as shown in Figures 2 and 3, is composed of a cartridge containing a multitude of capillary tubes (50) made of quartz (col. 5, lines 33-36).

With respect to the limitations of claim 9, the reference to Rounbehler et al. discloses that the absorption unit/collector (46) contains a plurality of capillary tubes (50) arranged in a bundle (col. 5, lines 33-36).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,310,681 (Rounbehler et al.) as applied to claim 1 above, and further in view of US 5,269,169 (Trenkle et al.).

The reference to Rounbehler et al. fails to expressly disclose that odor chemicals from botanical sources are captured using the hand-held sampling gun. The reference to Trenkle et al. discloses an apparatus and method for capturing and analyzing aromas from botanical sources utilizing an adsorbing unit, a suction device, and a connecting tube connecting the adsorbing unit and the suction device. One of ordinary skill in the

art would be motivated to utilize adsorbing means for capturing odor chemicals from botanical sources because aromas evolved from living fruits and plants are highly sought after in the perfumery and flavor arts.

10. Claims 4, 10, 11, 13, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,310,681 (Rounbehler et al.) as applied to claim 1, 3, and 9 above, and further in view of US 5,795,368 (Wright et al.).

With respect to the limitation of claim 4, the reference to Rounbehler et al. discloses that the adsorption collectors may comprise tubes having coatings of different materials and/or different thickness to selectively collect and release different samples, in this case, explosives. High vapor pressure explosives require tubes with a high polarity coating; however, because low vapor pressure explosives, which require low polarity coating, are more prevalent than their higher vapor pressure counterparts, only a few high polarity coated tubes are necessary in any given tube bundle (col. 7, lines 42-59). The reference to Rounbehler et al., however, fails to disclose utilizing Carbowax 20 as an adsorbing material in the adsorbing unit. The reference to Wright et al. discloses a microtrap sample concentrator containing a sorbent material to retain volatile organic chemicals. The reference states that one such sorbent may be Carbowax 20M (col. 8, lines 22 and 26). One of ordinary skill in the art would be motivated to use Carbowax 20 as the adsorbent material in Rounbehler et al. given that Carbowax 20 is a well-known sorbent material for trapping materials for analysis.

With respect to the limitation of claim 9, the reference to Rounbehler et al. discloses that the adsorption collectors may comprise tubes having coatings of different materials and/or different thickness to selectively collect and release different samples, in this case, explosives. High vapor pressure explosives require tubes with a high polarity coating; however, because low vapor pressure explosives, which require low polarity coating, are more prevalent than their higher vapor pressure counterparts, only a few high polarity coated tubes (50) are necessary in any given tube bundle (col. 7, lines 42-59).

With respect to the limitation of claim 11, the reference to Rounbehler et al. discloses that the tubes (50) within the adsorption unit/collector (46) have an inner diameter of about 0.53 mm, which is within the range of 0.07 mm to about 1.0 mm.

With respect to the limitation of claim 13, the reference to Rounbehler et al. discloses that the tubes (50) within the adsorption unit/collector (46) have a length of about 19 mm (col. 5, lines 42-44).

With respect to the limitation of claim 14, the reference to Rounbehler et al. fails to expressly recite that the bundle of tubes have an outer diameter less than six millimeters; however, the examiner argues that one of ordinary skill in the art would have the requisite ability to recognize the number of tubes necessary to maximize sampling efficiency. In view of the teaching of Rounbehler et al., which teaches the use of four hundred tubes within a cartridge/bundle, one of ordinary skill in the art could reduce the number of tubes, thereby reducing the size of the outer diameter of the tube bundle in order to make the tubes more accessible to smaller sampling sites.

With respect to the limitation of claim 15, the reference to Rounbehler et al. discloses that the adsorbent material applied to the inner wall of each tube (50) is applied in a thickness about 0.1 to five microns, typically one to two microns (col. 2, lines 37 and 38 and col. 5, lines 56-58).

11. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,310,681 (Rounbehler et al.) in view of US 5,795,368 (Wright et al.) as applied to claim 11 above, and further in view of In re Rose, 105 USPQ 237 (CCPA 1955).

With respect to the limitation of claim 12, the reference to Rounbehler et al. discloses that the tubes (50) within the adsorption unit/collector (46) have an inner diameter of about 0.53 mm. Neither the reference to Rounbehler et al. nor Wright et al. disclose using tubes having an inner diameter within the range of 0.75 mm to 0.9 mm. In re Rose held that changing the size of an article is not patentably significant since previous courts, In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141, have held that the size of an article under consideration is not ordinarily a matter of invention. Changing the size of the tubes would be within the purview of one of ordinary skill in the because one would recognize that larger tubes allow for a larger sample flow rate as well as a greater surface contact area, which provides for more trapped samples.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art to US 5,965,803 (Chinn, Jr. et al.) discloses an odor collection apparatus having an adsorbent coating affixed to the internal wall of a sealable container for holding an odor-emitting source, such as a flower (38).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Larkin whose telephone number is 571-272-2198. The examiner can normally be reached on 8:00 AM - 5:00 PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Larkin
AU 2856
10 September 2004

DANIEL S. LARKIN
PRIMARY EXAMINER